

G. HAZARDS

This section describes the potential for hazardous materials¹ and other hazards to affect human health and the environment at the project site. Historical land uses at the project site are known to have released contaminants affecting soils and groundwater. There may be a potential for construction workers and future site workers to come into contact with hazardous materials at the project site during and following project development.

Analysis of current conditions at the project site is based on Phase I investigations and a soil and groundwater quality investigation of the project site properties, other environmental investigations at the project site available in regulatory agency files, and a field reconnaissance of the project site in August 2004 conducted by a Baseline Environmental Consulting, registered geologist.

1. Setting

A description of existing conditions related to hazards at the project site is provided below.

a. Regulatory Framework. A myriad of laws and regulations at the federal, State, and local levels affect the management of hazardous materials. In California, the U.S. Environmental Protection Agency (U.S. EPA) has granted most enforcement authority over Federal hazardous materials regulations to the California Environmental Protection Agency (Cal EPA). In turn, two local agencies, the Milpitas Fire Department and Santa Clara County Department of Environmental Health (SCCDEH), have been granted authority by the State to enforce most regulations pertaining to hazardous materials in the City of Milpitas.

Oversight over investigation and remediation of sites affected by hazardous materials releases can be performed by State agencies, such as the Department of Toxic Substances Control (DTSC), regional agencies, such as the San Francisco Bay Regional Water Quality Control Board (RWQCB), or local agencies, such as SCCDEH or the Santa Clara Valley Water District (SCVWD).²

The Milpitas Fire Department maintains a Multi-Hazard Emergency Plan, which coordinates the City's preparedness and response efforts for natural and man-made disasters. The Milpitas Fire Department responds to routine, non-emergency hazardous materials incidents, and the Santa Clara County Hazardous Materials Response Team, composed of representatives of the Santa Clara Fire Department, California Dept of Forestry, and member cities, responds to large scale, emergency hazardous material incidents within the City of Milpitas.

¹ The California Health and Safety Code defines a hazardous material as, "...any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment." (California Health and Safety Code, Section 25501)

² Beginning in July 2004, SCVWD has been transferring lead regulatory agency status for leaking underground tank sites and other groundwater contamination sites to SCCDEH. Once the transition is complete, SCVWD will no longer conduct oversight over contaminated sites. Although the transition was ongoing as of the date of preparation of this EIR, it is assumed that SCCDEH will have taken over oversight of contaminated sites by the time that development of the project occurs.

b. Hazardous Materials Setting. The project site parcels have been evaluated in three Phase I site assessments: In August 2004, Treadwell & Rollo evaluated the Library Complex site; in June 2004, Lowney Associates evaluated the Eastern Parking Structure site and Proposed Retail Development site; and in October 2004, Baseline Environmental Consulting evaluated the Senior Housing Complex, County Health Facility, and the Western Parking Structure site. The Treadwell & Rollo report for the Library Complex site included the collection and analysis of soil and groundwater samples. In August 2004, a soil and groundwater quality investigation was prepared by Lowney Associates for the Eastern Parking Structure and Proposed Retail Development sites. Other environmental investigations were prepared under regulatory oversight for the investigation and remediation of leaking underground storage tanks (USTs) at the Library Complex and Eastern Parking Structure site. Based on this information, hazardous materials conditions at these sites are summarized below, followed by a general discussion of lead, asbestos, and mold in project site structures.

(1) Library Complex Site (160 North Main Street, APN 28-24-019). This site contains the former Milpitas Grammar School, which was constructed in 1916 and previously was used for the Milpitas Senior Center and Milpitas City Hall. The building at the site is vacant, and has been affected by mold contamination. A gasoline UST was historically present in the southern portion of this site, adjacent to the former City Corporation Yard, at 116 North Main Street. Releases from the UST were investigated and remediated jointly with another UST at the former City Corporation Yard; details of the investigation are provided below, under the Eastern Parking Structure Site. The Phase I identified residual contamination from the former UST at the Library Complex site, and contamination migrating from the adjoining Milpitas Transmission Site, at 130 Windsor Street (discussed below, under Eastern Parking Structure site), as areas of potential concern.³

The Phase II soil investigation performed by Treadwell and Rollo included the collection of 32 soil and five groundwater samples from 13 locations at the Library Complex and adjoining Eastern Parking Structure site. The samples were analyzed for petroleum-related compounds, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and heavy metals. Although soil and groundwater samples contained petroleum hydrocarbons, oil and grease, gasoline-related VOCs, and lead above laboratory reporting limits and naturally-occurring concentrations, the report concluded that there was no indication of significant contamination that might require special handling during construction.⁴ The report recommended that a soil management plan and site safety plan be prepared for construction activities at the site.⁵

(2) Eastern Parking Structure Site (112-120 North Main Street, 94-130 Winsor Avenue, APNs 22-24-015, -015, -016, -020, and -026). This site has been used for industrial and commercial purposes since at least 1926, when the existing structure at 116 North Main Street was built as a blacksmith shop. Other current and prior land uses at this site associated with hazardous materials use include a vehicle towing service and yard, machine shops, an automobile body shop, a radiator and welding shop, a transmission repair shop, a City Corporation Yard, and vehicle parking. Releases of petroleum and other contaminants from USTs at this site have been reported, and are discussed

³ Treadwell & Rollo, 2004, Phase I and Limited Phase II Environmental Site Assessment, 160 North Main Street, Milpitas, California, August 18.

⁴ Ibid.

⁵ Ibid.

separately, below. The Phase I report recommended a soil and groundwater investigation in areas of concern, not previously evaluated in UST-related investigations, preparation of a soil and groundwater management plan for development, and evaluation of lead and asbestos issues in building structures.⁶

The subsequent soil and groundwater quality investigation included collection of soil and groundwater samples from 19 sampling locations at the former blacksmith shop at 112-116 North Main Street, the residence at 86 North Main Street, the former auto body shop at 94 Winsor Avenue, areas adjacent to the railroad tracks east of Winsor Avenue, and near parts cleaning sinks at the transmission shop at 130 Winsor Avenue. Although petroleum compounds, polynuclear aromatic hydrocarbons (PAHs), acetone, and metals were identified in site soils and groundwater, the concentrations identified did not indicate evidence of a significant hazardous materials release. The report concluded that, with the exception of releases from former USTs at the 130 Winsor Avenue site (discussed below), no contamination is known to be present at the site in excess of established screening levels for commercial properties.⁷

In 1990, two gasoline USTs were removed from the City Corporation Yard site (116 North Main Street) and the adjoining Milpitas Senior Center site (160 North Main Street). These sites were investigated and remediated in tandem. Approximately 20 soil borings and seven groundwater monitoring wells were installed at the sites to evaluate the extent of soil and groundwater contamination. Two soil remedial actions were performed (in October-November 1991 and August 1998) to remove petroleum-contaminated soils. After the 1998 remedial action, oxygen releasing compound were placed in the excavations to accelerate the natural bioremediation of the contaminants. Subsequent soil and groundwater investigations through 2001 demonstrated that the majority of the contaminated soils had been removed, and that contaminants in groundwater were naturally diminishing over time. Although some residual contamination was present, SCVWD closed the UST cases in April 2001.⁸

In March 1994, gasoline and waste oil tanks were removed from the Milpitas Transmission Shop at 130 Winsor Avenue. Evidence of petroleum and solvents (likely disposed of in the waste oil tank) was apparent in the tank excavation. Approximately 20 to 25 cubic yards of contaminated soils from the tank excavation were disposed of off-site in 1996. In December 1996, five soil borings were sampled and one monitoring well was installed, which identified contamination near the tank location, which extended north and west of the tank area. No further investigation was conducted at the site until August 2003, when additional soil and groundwater samples were collected from nine locations, to attempt to delineate the vertical and horizontal extent of the contamination. The investigation concluded that the soil contamination appeared to be limited to depths of less than 20 feet below the ground surface (bgs), and did not appear to extend beyond the property limits. The investigation report recommended additional investigation, including the installation and sampling of groundwater monitoring wells, to further delineate the extent of contamination and determine what

⁶ Lowney Associates, 2004, Proposed Milpitas Library Expansion Parcels Phase I, June.

⁷ Lowney Associates, 2004, Soil and Groundwater Quality Evaluation, Milpitas Library Expansion Parcels, Milpitas, California, Draft, August 31.

⁸ SCVWD, 2001, Fuel Leak Site Case Closure Letter, Old Corporation Yard, 116 North Main Street, Milpitas, California, Case No. 10-099, April 11.

form of remediation may be warranted.⁹ This site remains under regulatory oversight; future investigation and remediation will be determined by SCCDEH/SCVWD.

(3) Proposed Retail Development Site (86 North Main Street, APN 28-24-025). This parcel contains a single-family residence and two sheds. The residence was constructed elsewhere during the 1930s and was moved to the project site approximately 40 years ago. A City directory search performed for the Phase I Site Assessment revealed that “Dutra Welding and Machine” was present at this parcel from 1986 through 1991. No evidence of significant hazardous materials use or release was identified at this parcel during a visual reconnaissance. The Phase I report recommended evaluation of lead and asbestos hazards and preparation of a soil and groundwater management plan for this site, in conjunction with the adjoining Eastern Parking Structure site (described above).¹⁰ The soil and groundwater quality investigation for the Eastern Parking Structure site (described above) included the collection of two shallow soil samples from this site, which were analyzed for total lead, polycyclic biphenyls (PCBs), and asbestos. No elevated lead concentrations, PCBs, or asbestos were identified in the samples.¹¹

(4) Senior Housing Complex (163 North Main Street, APN 22-08-041). This parcel contains the DeVries Home, constructed in 1915, and a second residence and other outbuildings constructed during the 1930s through the 1950s.¹² Portions of this site were used for orchards from at least 1939, the date of the first available aerial photograph of the site. The Phase I recommended an evaluation of potential lead and asbestos hazards in the site structures, and a soil investigation to determine if agricultural chemical residues, from agricultural cultivation, may be present in shallow soils at the site.¹³

(5) County Health Facility (Vacant Parcel, APN 22-08-042). This site, like the adjoining Senior Housing Complex site, contained orchards from at least 1939 until around 1965. No structures were identified on this site on aerial photographs from 1939, 1956, 1982, or 1993; a small building, which was reportedly used for a produce stand, was identified near the northern site boundary on a 1965 aerial photograph. The Phase I recommended testing for agricultural chemical residues in shallow soils, in conjunction with the investigation of the Senior Housing Complex site (described above).

(6) Western Parking Structure (Vacant Parcel, APN 22-08-003). This parcel was used for two farmhouses and orchards from at least 1939 through around 1965, when the orchards were removed. Between 1965 and 1973, the farmhouses were removed to accommodate the current Calaveras Boulevard alignment and off-ramp. The Phase I recommended testing for agricultural

⁹ Hoexter Consulting, 2004, Initial Plume Definition for Milpitas Transmission, 130 Winsor Street, Milpitas, California, February 13.

¹⁰ Lowney Associates, 2004, Proposed Milpitas Library Expansion Parcels Phase I Site Assessment, June 3.

¹¹ Lowney Associates, 2004, Soil and Groundwater Quality Evaluation, Milpitas Library Expansion Parcels, Milpitas, California, Draft, August 31.

¹² Milpitas Historical Society, 2003, Dr. Renselaer Smith Home, (<http://www.milpitashistory.org/devriessmith/drsmithhouse.html>) updated November 3.

¹³ Baseline Environmental Consulting, 2004, Phase I Site Assessment, Senior Center, County Health Facility, and Parking Structure Sites, North Main Street, Milpitas, California, October.

chemical residues in shallow soils, in conjunction with the investigation of the Senior Housing Complex site (described above).

(7) Lead, Asbestos, and Mold in Building Materials. Prior to 1978, lead compounds were commonly used in interior and exterior paints. Prior to the 1980s, building materials often contained asbestos fibers, which were used to provide strength and fire resistance to the materials. Demolition or renovation of structures constructed prior to these dates has the potential to release lead particles and/or asbestos fibers to the air, where they may be inhaled by construction workers and the general public. As all of the current structures at the project site were constructed prior to 1978, there may be lead and asbestos issues associated with demolition of any existing buildings.

Lead is a suspected human carcinogen, a known teratogen (i.e., causes birth defects), and a reproductive toxin. Federal and State regulations govern the renovation and demolition of structures where lead or material containing lead are present. Regulations pertaining to demolition of structures with lead-based paint are promulgated by federal and State agencies.

Asbestos is a known human carcinogen. Federal, State, and local requirements also govern the removal of asbestos or suspected asbestos-containing materials, including the renovation and demolition of structures where asbestos is present. These requirements are promulgated by the federal and State agencies and the Bay Area Air Quality Management District (BAAQMD).

Mold contamination has been identified at the former Milpitas Grammar School Building. Molds are naturally-occurring organisms that can grow and spread on organic-based building materials in the presence of moisture. Molds may produce allergens, irritants, or toxins that can produce significant health effects for exposed populations. Remediation of mold contamination is currently not regulated by State or Federal agencies, but the US EPA issued guidelines in March 2001, entitled "Mold Remediation in Schools and Commercial Buildings" (EPA Document 402-K-01-001). These guidelines include methodologies for investigation and evaluation of mold contamination, and containment and worker health and safety procedures for remediation activities. An important step in the remediation process is to eliminate the moisture problem that created the mold contamination, so that the contamination does not reoccur.

2. Impacts and Mitigation Measures

This section analyzes the impacts related to hazards that could result from implementation of the NMSD Project. The subsections begin with criteria of significance, which establish the thresholds for determining whether a project impact is significant. The latter part of this section presents the potential hazard impacts associated with the proposed project. Mitigation measures are provided as appropriate.

a. Criteria of Significance. The proposed project would have significant impacts relating to hazardous materials if it would:

- Create a significant hazard to the public or the environment as a result of routine transport, use, production, upset, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

- Bring people into direct contact with hazardous materials on a listed hazardous materials site, compiled pursuant to Government Code section 65962.5;
- Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination in excess of soil and groundwater regulatory cleanup goals developed for the site;
- Impair the implementation or interfere with an emergency response or evacuation plan; or
- Result in a safety hazard for people working in the project area if the area is within an airport land use plan area.

b. Less-than-Significant Impacts. Following construction of the project, the project would not result in significant impacts from the routine transport, use, or disposal of significant quantities of hazardous materials. Although future retail and commercial businesses at the project site are not known, the applicable land use designations generally do not provide for substantial hazardous materials. Any businesses that may transport, use, and/or dispose of hazardous materials would be subject to existing hazardous materials regulations, such as those implemented at the project site by SCCDEH and Milpitas Fire Department (see Regulatory Framework, above). The project site is not located within an airport land use plan area.

Project improvements would not be expected to impair the implementation or interfere with the City's Multi-Hazard Emergency Plan (Plan). Although no impairment in the Plan is anticipated, the Milpitas Fire Department Office of Emergency Services (OES) encourages coordination during the planning process, so proposed project improvements can be more effectively incorporated in the Plan.¹⁴ For example, the Library could be incorporated into the City's disaster shelter network, and those facilities could also be included in the City's emergency notification system.

Implementation of the project would therefore have no significant impacts related to the above potential concerns.

c. Significant Impacts. The NMSD Project would result in five potentially significant impacts related to hazardous materials.

Impact HAZ-1: Implementation of the NMSD Project could expose construction workers and/or the public to hazardous materials from contaminants in soil during and following construction activities. (S)

Environmental investigations have identified hazardous materials in soils and shallow groundwater at several parcels at the project site. The extent of petroleum and solvent contamination at the Milpitas Transmission site (130 Winsor Avenue) remains under investigation. Residual contamination related to underground petroleum storage tanks are present in soils and groundwater at the former Senior Center (160 North Main Street) and former City Corporation Yard (116 North Main Street) sites. Because of former leaking underground storage tanks, the Milpitas Transmission, former Senior Center, and City Corporation Yard sites are on the hazardous material site list compiled under Government Code Section 65962.5. A soil and groundwater quality investigation identified

¹⁴ Silvi, Americo, 2004, Battalion Chief, Milpitas Fire Department Office of Emergency Services, personal communication with Todd Taylor of Baseline, 31 August.

additional contaminants in soil and water at several parcels south and east of the former Corporation Yard. Although the concentrations of contaminants identified during the investigation were below typical regulatory thresholds, the report concluded that there was a potential for additional contamination to be encountered, based on historical land uses. There may also be a potential for agricultural chemical residues to be present in shallow soils in the western portion of the site from historic orchards.

Future construction workers and maintenance workers would have direct contact with surface and subsurface soils and groundwater, and future retail/commercial workers at the project site may also be exposed to contaminants in surface soils. These workers may be exposed to contaminants via inhalation of dust and vapor, direct dermal contact with soils and groundwater, and/or accidental ingestion. Improper storage, handling, and disposal of contaminated materials could increase potential risks to construction workers and nearby workers and residents.

Mitigation Measure HAZ-1: Prior to the issuance of any grading, demolition, or building permits for the project site, a Risk Management Plan (RMP) shall be prepared for the project site. At a minimum, the RMP shall establish soil and groundwater mitigation and control specifications for grading and construction activities at the site, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel. The RMP shall also include procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed of in accordance with applicable regulations and permits. The RMP shall describe groundwater monitoring wells that will be affected by the construction activities, provide procedures for the proper abandonment of those wells, and provide locations for replacement monitoring wells, if warranted. The RMP shall also include an Operations and Maintenance Plan component, to ensure that health and safety measures required for future construction and maintenance at the project site shall be enforced in perpetuity. The RMP shall be submitted to the Milpitas Fire Department for review and approval. (LTS)

Impact HAZ-2: Implementation of the NMSD Project could hinder ongoing investigation and remediation of petroleum hydrocarbon and solvent contamination at a project site parcel. (S)

The Milpitas Transmission Shop at 130 Winsor Avenue is currently under regulatory oversight for investigation of releases of petroleum products and solvents from former underground storage tanks. Based on the recommendations of the most recent investigation, it is likely that additional investigation will be required, which could lead to remedial activities such as soil removal and/or groundwater treatment. The extent of investigation and remediation required will be based on SCCDEH/SCVWD requirements.¹⁵

Should development of the project site improvements take place prior to regulatory case closure of the Milpitas Transmission Shop site, project development could hinder the investigation and reme-

¹⁵ As discussed under Regulatory Agency Framework, above, prior oversight of the Milpitas Transmission Shop property has been performed by SCVWD, but it is expected that SCCDEH will assume oversight shortly.

diation of the release by covering areas of contamination with impervious surfaces, and/or interfering with groundwater monitoring or treatment systems.

Mitigation Measure HAZ-2: If development of the project occurs prior to regulatory case closure of the 130 Winsor Avenue site, SCCDEH/SCVWD approval shall be a condition of requirement for any demolition, grading, or construction permits on that property. Any requirements of SCCDEH, such as abandonment and/or replacement of groundwater monitoring wells, shall be incorporated as conditions of approval for the permit. (LTS)

Impact HAZ-3: Improper use or transport of hazardous materials during construction activities could result in releases affecting construction workers and the general public. (S)

Construction activities proposed by the project may involve use and transport of hazardous materials. These materials could include contaminated soil and/or groundwater, building demolition debris containing lead and asbestos, and fuels, oils, and other chemicals used during construction. Removal, relocation, and transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment.

Mitigation Measure HAZ-3: The RMP for the project site shall include procedures for emergency incident response and the management and disposal of contaminated soils and groundwater (see Mitigation Measure HAZ-1, above). Use, storage, disposal, and transport of hazardous materials during construction activities shall be performed in accordance with existing local, State, and federal hazardous materials regulations. No additional mitigation is required. (LTS)

IMPACT HAZ-4: Development of the proposed project could expose construction workers and future residents to potentially hazardous concentrations of agricultural chemical residues in shallow soils. (S)

The western portion of the project site has been used for agricultural purposes since at least 1939, the date of the earliest available historical aerial photograph. Although there are no recent records of agricultural chemical application at the project site, chemicals could potentially have been used in the past. Most agricultural chemicals in use today have short persistence, and quickly degrade into less toxic compounds. Some classes of agricultural chemicals commonly used in the past, however, such as organochlorine pesticides, chlorinated herbicides, and inorganic compounds, can leave residues in shallow soils that persist for many decades. If these classes of agricultural chemicals were used on the proposed project site during historical cultivation, agricultural chemical residues could potentially be present in shallow soils at the site. If present, these residues could potentially pose a health risk to construction workers and future site users.

Mitigation Measure HAZ-4: Prior to the issuance of grading or construction permits for the project site parcels west of North Main Street (APNs 22-08-041, 22-08-042, and 22-08-003), a qualified environmental professional shall conduct an environmental investigation at the project site in accordance with California Department of Toxic Substances Control (DTSC) Interim Guidance for sampling former agricultural fields (Interim Guidance).¹⁶ Based on the size of the

¹⁶ DTSC, 2002, Interim Guidance for Sampling Agricultural Fields for School Sites (Second Revision), August 26.

site, the Interim Guidance specifies that a minimum of eight composite samples should be collected from shallow soils and analyzed for potential organic and inorganic agricultural chemical residues. As specified in the Interim Guidance, any detected organic compounds or metals above naturally-occurring concentrations must be evaluated in a risk assessment, and additional remedial action such as soils removal may be required, depending on the results of the environmental investigation and risk assessment. Findings shall also be incorporated into the RMP for the project site (Mitigation Measure HAZ-1, above). (LTS)

Impact HAZ-5: Demolition or renovation of structures containing lead-based paint, asbestos-containing building materials, and/or mold contamination could release airborne toxics, which may affect construction workers and the public. (S)

Based on historical land use information, all of the project site buildings were constructed prior to 1965, and therefore have the potential to contain lead-based paint and/or asbestos-containing building materials.

According to information from a Phase I Site Assessment, mold contamination may be present at the former Senior Center building (160 N. Main Street). If not properly remediated, the mold and associated toxins could be dispersed during renovation or demolition activities at that property, which has the potential to pose a health risk to construction workers and the nearby public. Failure to address the underlying moisture problems at the site, which resulted in the original mold contamination, could potentially result in recurrence of the mold contamination, potentially affecting future workers and users of the property.

Mitigation Measure HAZ-5: Implementation of this two-part measure would reduce this impact to a less-than-significant level:

- (a) As a condition of approval for any demolition or renovation permit for a structure known or suspected to have been constructed prior to 1985, an asbestos and lead-based paint survey shall be performed. If asbestos-containing materials were determined to be present, the materials shall be abated by a certified asbestos abatement contractor in accordance with the regulations and notification requirements of the Bay Area Air Quality Management District. If lead-based paint were identified, then federal and State construction worker health and safety regulations shall be followed during renovation or demolition activities. If loose or peeling lead-based paint were identified, they shall be removed by a qualified lead abatement contractor and disposed of in accordance with existing hazardous waste regulations.
- (b) As a condition of any demolition or renovation permit for the former Senior Center Property (160 North Main Street), a qualified environmental professional shall be retained to investigate, evaluate, and remediate the mold contamination at the site, in accordance with guidelines in US EPA's "Mold Remediation in Schools and Commercial Buildings" (EPA Document 402-K-01-001). A final mold remediation report shall be produced to document the remediation and describe any maintenance measures required to prevent recurrence of the mold contamination. These maintenance measures shall be incorporated into conditions of approval for the construction or renovation permit. (LTS)

